

REDUCTION OF THE GENUS GONIOGYNA TO CROTALARIA (LEGUMINOSAE)

Velva E. Rudd

California State University, Northridge, Ca. 91330

A species of legume occurring in Sri Lanka, India, and West Pakistan, formerly known as Heylandia latebrosa (L.) DC. and, more recently, as Goniogyna hirta (Willd.) Ali, is now accepted as referable to Crotalaria. Polhill (Kew Bull. 22: 171, 301, 302. 1968) noted that there is no good reason for separating the genus Goniogyna DC. (= Heylandia DC.) from Crotalaria, and placed it in section Calycinæ Wight & Arn. As a Crotalaria, a new specific name is required, here proposed as Crotalaria hebecarpa (DC.) Rudd, comb. nov.

The original publication of Goniogyna DC. (Ann. Sci. Nat. Paris 4: 91. Jan 1825) included three species: G. hebecarpa, G. leiocarpa, and G. latebrosa. Later (Prodr. 2: 123. Nov 1825; Mém. Leg. 198. Feb 1826), to honor his illustrator, J. C. Heyland, de Candolle published the genus Heylandia, based on the same three species, with no mention of the earlier generic name. Plate 34 in the Mémoires, reproduced in this paper, is an illustration by Heyland, to whom the genus was dedicated.

In his discussion of Heylandia in the Mémoires (pp. 198-201) de Candolle mentioned its similarity to Crotalaria except that its pods are compressed rather than inflated as in Crotalaria. Bentham concurred, stating "It is closely allied to Crotalaria in which Roxburgh had included it, but is easily known by its constantly axillary inflorescence, and small lenticular pod" (Hook. London Journ. Bot. 2: 471. 1843). In floral and vegetative characters there is apparent close relationship with such species as Crotalaria angulata Mill. (= C. biflora (L.) L.), C. evolulooides Wight ex Wight & Arn., and C. prostrata Roxb.

As mentioned by Bentham, Roxburgh (Fl. Ind. 3: 271. 1832) recognized this taxon as a Crotalaria, C. uniflora Koenig ex Roxburgh, but cited in synonymy Hallia hirta Willd., the basis of Goniogyna leiocarpa DC., Heylandia leiocarpa DC. and Goniogyna hirta (Willd.) Ali. No other specimen was cited.

Wight and Arnott (Prodr. 180. 1834) maintained Heylandia as a separate genus but combined de Candolle's three species, as H. latebrosa DC., believing them to be states of the same plant, with the pods varying "from glabrous to very hairy on the same specimen". They included in the synonymy, Crotalaria uniflora Koenig ex Roxburgh.

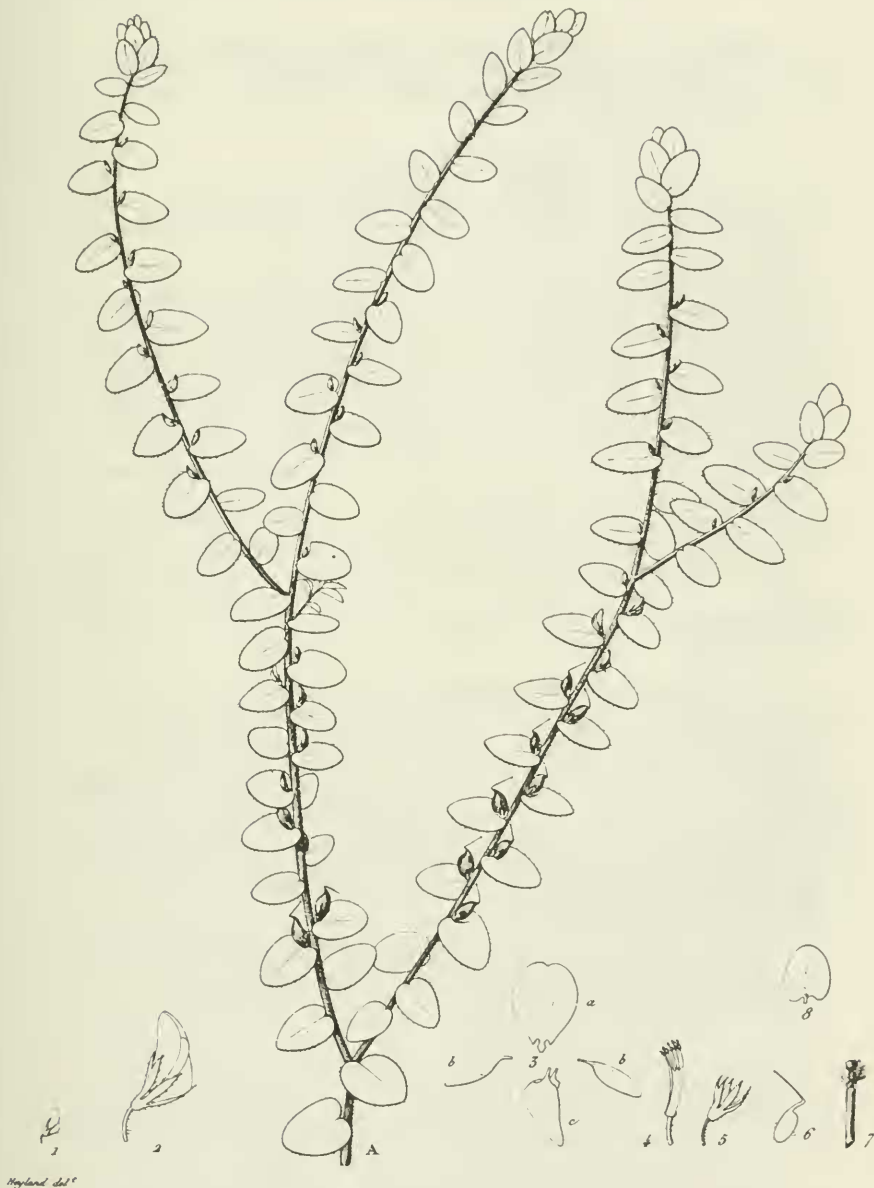


Fig. 1. Copy of plate 34, *Heylandia hebecarpa*.
A. P. de Candolle, Mémoires sur la Famille de Légumineuses.

Following is the rather lengthy synonymy of this one little species, which will be included, in greater detail, in the treatment of Crotalaria for the Smithsonian Project, A Revised Handbook of the Flora of Ceylon.

CROTALARIA HEBECARPA (DC.) Rudd, comb. nov.

Hallia hirta Willd., Sp. Pl. 3: 1169. 1802. Type: /Koenig ?/, India, Tranquebar. Holotype B-Willd. (microfiche 13750), non Crotalaria hirta Willd. 1803, nec Lag. 1816, nec Roth 1821.

Goniogyna hebecarpa DC., Ann. Sci. Nat. Paris 4: 92. Jan 1825.

Type: Leschenault, Ceylon, in 1823. Holotype G-DC; isotype P.

Goniogyna leiocarpa DC., Ann. Sci. Nat. Paris 4: 92. Jan 1825, based on Hallia hirta Willd., non Crotalaria leiocarpa Vog. 1843.

Heylandia hebecarpa DC., Prodr. 2: 123. Nov 1825; Mém. Leg. 200.

Feb 1826; tab. 34. Jan 1827, based on the same collection as

Goniogyna hebecarpa DC., without reference to the earlier name.

Heylandia leiocarpa DC. Prodr. 2: 123. Nov 1825; Mém. Leg. 200.

Feb 1826, based on Hallia hirta Willd., non Crotalaria leiocarpa Vog. 1843.

Crotalaria uniflora Koenig ex Roxb, Fl. Ind. 3: 271. 1832, based on Hallia hirta Willd. given as synonym but, possibly, intended as a new name for the same Koenig collection, non Baker in Oliver, 1871.

Goniogyna hirta (Willd.) Ali, Taxon 16: 463. 1967, based on Hallia hirta Willd.

The third species of Goniogyna, G. latebrosa (L.) DC., Ann. Sci. Nat. Paris 4: 92. Jan 1825 (= Heylandia latebrosa (L.) DC., Prodr. 2: Nov 1825; Mém. Leg. 201. Feb 1826), based on Hedysarum latebrosum L., Mant 2: 270. 1771, was actually described from a galled shoot of a rhamnaceous shrub, Sageretia theezans (L.) Brongn. (Polhill l. c. p. 301; in litt. 1969), therefore is not included in the above list of synonymy. The specimen in the Linnaean herbarium, LINN 921.15, presumably is the holotype. It bears the name of Hedysarum latebrosum in Linnaeus' handwriting but no collector's name or locality is given.

I wish to thank Dr. Roger Polhill who kindly advised me as to the status of various epithets related to this taxon.